

METHOD STATEMENT & RISK ASSESSMENT (AQUACHEM)

PART A – COMPANY DETAILS	
COMPANY NAME:	CONTACT NAME:
AQUACHEM	Tommy Dwyer
ADDRESS:	PHONE:
UNIT 9, DUNBOYNE BUSINESS PARK,	+35314826966
DUNBOYNE CO MEATH IRELAND	EMAIL:
	tommy@aquachemwm.ie

PART B - PROJECT DETAILS

PROJECT TITLE: SITE ADDRESS:

Cleaning and Disinfection of the following Cold-Water Storage Tanks HOLIDAY INN EXPRESS DUBLIN CITY CENTRE 28-32 O'CONNELL STREET UPPER, DUBLIN 1

DESCRIPTION OF TASK / ACTIVITY:

Aquachem Water Management will carry out a Clean & Disinfection to cold-water storage tanks.

Chemical used in disinfection: Huwa San

COSHH refs:

GHS05 - Corrosion



GHS07 - Warning



Clean & Disinfect of the 27000L cold-water storage tanks.

START DATE: 10TH OF SEPTEMBER 2024

PART C — PERSONNEL INVOLVED

NAME:

STEPHEN NOBLE

SITE SUPERVISOR / SERVICE ENGINEER:

JONATHAN PASEOS

TOMAS KALOVIC

END DATE: 10TH OF SEPTEMBER 2024

ROLE / POSTISION:

SITE SUPERVISOR / SERVICE ENGINEER

SERVICE ENGINEER



PART D – EQUIPMENT REQUIRED

KEY PLANT & TOOLS (ATTACH CERTIFICATION IF APPLICABLE)

- General cleaning tools (hand tools, pumps, wet vac, telescopic tools, brushes, mops, buckets, battery
 operated tools)
- The use of a reach and clean system
- Signs & barriers

PART E – SAFETY

IDENTIFIED HAZARDS (REFER TO THE TASK SPECIFIC RISK ASSESSMENTS BELOW)

SPECIFIC STAFF TRAINING LIST (E.G. SITE INDUCTION, SAFE PASS, MANUAL HANDLING, FIRST AID):

- Site Induction
- Confined Space
- Safe Pass
- Manual Handling

CONFINED SPACE / RESCUE PLAN

All Staff working within confined spaces have undergone appropriate training. Staff will measure oxygen levels using a detection meter in the confined space and will not enter unless deemed satisfactory. Oxygen levels will be monitored throughout the duration of works. If oxygen levels deplete, staff will exit the confined space immediately. Staff will ensure that a buddy system is in operation, one person in the confined space and one person outside. The person inside the confined space will always be in contact of the person outside maintaining effective means of communication by way of using walkie talkies. Staff will wear appropriate PPE and RPE (if deemed necessary) including suitable particle masks, gloves, and protective clothing. Operatives will work a cycle of 30 minutes with a 10-minute break to ensure they do not suffer from excessive heat (time spent in the tanks will be limited) NO ONE is to enter the confined space in the event of someone collapsing. If this scenario arises, the fire brigade and ambulance will be immediately contacted. 112 will be called by the person outside of the confined space getting emergency assistance as soon as possible. The manager on site will be informed of any such emergencies.

WORKING AT HEIGHT:

Carry out risk assessments for work at height activities and make sure that all work is Planned. Follow the General Principles of Prevention for managing risks from work at height – take steps to avoid, prevent or reduce risks. Chose the right work equipment and select collective measures to prevent falls such as guard rails and working platforms.

Working with Ladders:

Before using any ladders, our engineers will inspect the ladder ensuring it is free from defects and suitable for the task ahead.

Inspection tags are evident on all our ladders. The terrain where the ladder it is to be positioned is also surveyed to ensure it is suitable. Type 1 ladders are used and will be properly secured at the top, properly footed, and will not exceed 75 degrees angle when erected. The 4 to 1 rule is always followed. When climbing the ladder our engineers will always use 3 point of contact and overreaching will also be avoided.



SEQUENCE OF OPERATIONS (E.G. SCOPE OF WORKS):

Our service engineers will report to reception and sign in.

Appropriate signage / barriers will be erected to cordon off work area from authorised personnel.

Outlets and pumps on distribution / supply network and main water supply to pump will be shut off and locked out – the Client's Permit to Work system to be used.

The tank lids will be removed and stored away from work area.

The 110v submersible pumps will be positioned within the tank to drain away water – water will be drained to a suitable location as agreed with the Client.

Any storage drums will be located in a safe, secure location within a spill tray to prevent any chemical spillages.

Hand Scrubbers will be used within the tank to clean and then a wet vac will be utilised to empty tank.

Tank is then refilled with clean water and the correct amount of Huwa San disinfectant will be added. The amount of Huwa San added is calculated by the size of the tank.

The Huwa San solution will be added to the water system and measured via indicator strips until a minimum level of 50ppm remains in the system for up to 1 hour.

The client's representative will be informed that work is complete, and equipment is removed with the engineering log completed at signed off.

Site operatives will operate a "clear as you go" policy – this will ensure all work areas and shared surfaces remain free from hazards.

Where possible materials will be segregated for recycling purposes



PLEASE NOTE ADDITIONAL PPE INCLUDING FACEMASKS MUST BE WORN ON SITES WHEN CLOSE WORKING CANNOT BE AVOIDED - REFER TO THE CLOSE WORKING PERMIT.

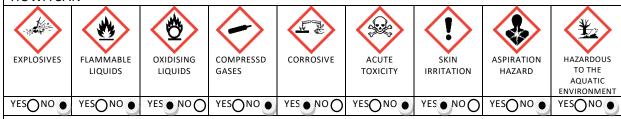


PART F – HAZARDOUS SUBSTANCES

ATTACH SAFETY DATA SHEETS IF NOT MADE READLILY AVAILABLE FOR SITE SUPERVISOR.

LIST HAZARDOUS SUBSTANCES & IDENTIFY RISKS BELOW

HUWA SAN



PART G - ENVIRONMENTAL

WASTEWATER FROM THE STORAGE TANK WILL BE DRAINED DIRECT TO STORM DRAIN. THE TANK WATER IS DOMESTIC WATER AND CAN BE DRAINED/DISPOSED OF SAFELY.

ALL CHEMICALS WILL BE STORED WITHIN COMPANY VEHICLES (VAN) WHILE WORKS ARE UNDERTAKEN. DISINFECTANT CHEMICAL REQUIREMENTS ARE MINIMAL CIRCA 6 LITRES TOTAL WHICH WILL BE POURED FROM THE HOLDING DRUM (IN THE VAN) INTO A MEASURING JUG AND THEN POURED INTO THE TANK BY HAND. A CHEMICAL SPILL KIT WILL BE ON HAND AT ALL TIMES. THE DISINFECTANT CHEMICAL WILL BE LEFT IN THE TANK TO BREAK DOWN NATURALLY SO DRAINING OF TREATED WATER WILL NOT BE REQUIRED. MSDS OF DISINFECTANT CHEMICAL IS ATTACHED WITH THIS DOCUMENT.

ALL WASTE MATERIALS, DEBRIS ETC FROM WORKS WILL BE REMOVED FROM SITE AND DISPOSED OF ACCORDINGLY NO WASTE MATERIALS ARE EXPECTED FROM THIS JOB.

PART H - RISK ASSSSMENTS

	Insignificant	Minor	Moderate	Major	Catastrophic
	(1)	(2)	(3)	(4)	(5)
Certain (5)	5	10	15	20	25
Very Likely (4)	4	8	12	16	20
Possible (3)	3	6	9	12	15
Unlikely (2)	2	4	6	8	10
Very Unlikely (1)	1	2	3	4	5
Risk Rating	Actions (all	risks must be elimi	nated or reduced as	far as is reasonably p	racticable).
15 - 25	_		lly mitigation to elim hod statement temp	inate or to further red plate SF 39).	uce the risk –
8 - 12		=		k, and if it remains a h of any hazards – metho	-
1 - 6	•	•	sonably practicable on the sinate the risk, then	control measures are in the should be done.	n place, however,



RISK ASSESSMENTS:

Site specific Risk Assessment and Control Measures:

ACCESS & EGRESS Assessment of Residual Risk **Current Risk** People at Rating Hazard Risk **Controls** Risk S S IR RR -Site supervisor will ensure that all employees (Aquachem site personnel) Slips, trips and falls 3 Poor 12 Αll are able to reach their place of work safely, i.e. passageways, passenger access/egress at Aquachem hoists, staircases. work area site personnel - All hazards are noted on the first day of works by Aquachem site (employees) supervisor or site manager to ensure employees are made aware of safe access routes - Site Supervisor will endeavour to ensure that all walkways are safe and free from obstruction such as stored material and waste. - Site Supervisor will ensure that adequate barriers or other edge protection to prevent falls from open sides of buildings, e.g. safety rails are provided. - Site Supervisor will ensure that all holes and openings in floors are securely fenced off or securely fixed covers are provided. - Site Supervisor will ensure that the work area is kept tidy, and materials stored safely. - Site Supervisor will ensure that proper arrangements are provided for collecting and disposing of waste as per the client's onsite waste procedures -Aquachem Management team will ensure provision of Personal Protective Equipment where necessary.



MANUAL HANDLING Assessment of Residual Risk **Current Risk** People at **Rating** Hazard Risk **Controls** Risk S RR S IR All Aquachem -All operatives to be trained in manual handling 3 Spinal injuries, broken 3 6 Inadequate 15 -All operatives will be issued with adequate PPE e.g. safety boots, gloves. information, toes or feet, site instruction, lacerations, sprains, personnel -Maintenance log of equipment to be kept and any defects training & strains leading to a (employees) rectified. equipment 3day absenteeism -When selecting new equipment consideration will be given to from work minimising manual handling. -Eliminate or where elimination is not reasonably practicable reduce manual handling to as low as is reasonably practicable egg providing mechanical aids e.g., trolley etc. Spinal injuries, broken All Aquachem -First carry out a trial lift by rocking the load from side to side, and then 2 3 Incorrect 2 10 6 try to lift a small amount to get the feel for the load. techniques toes or feet, site lacerations, sprains, personnel -Two man/ buddy system to be implemented where bulky / heavy loads strains (employees) pose a higher risk to one individual to lift - Stand reasonably close to the load, feet hip width apart, one foot slightly forward pointing in the direction in which you are going. -Bend your knees and keep your back straight. -Lift slowly and smoothly. -Avoid twisting your body when lifting or carrying a load. -Lighting must be adequate and access clear. -When 2 or more people are carrying a load, one person must take charge and co-ordinate the lift.



Hazard	Risk	Assessment of Current Risk			People at Risk	Controls	Residual Ri Rating				
		L	S	IR			L	S	RR		
Electrocution causing burns, shock, and death	Burns, shock, and death	4	5	20	All Aquachem site personnel (employees)	-All portable electric tools, lighting will be operated at a voltage of 110 Volts where possible. -All portable tools will be PAT tested six monthly where applicable -Where transformers are used they will as far as possible be placed close to the power source and be fitted with RCD protection. -Any signs of damage to or interface with equipment, wires and cables will be checked and taken out of use immediately where deemed unsafe to use. -Only qualified electricians will be permitted to carry out electrical work Appropriate ventilation must be provided. Electricians to notify operators of any electrical dangers. -All connections to power points will be made with proper plugs.	2	3	6		



Hazard	Risk		essme rrent		People at Risk	Controls	Res	sidua Rati	al Risk ing
		L	S	IR			L	S	RR
Sharp tools	Laceration to hands & other parts of the body	5	4	20	All Aquachem site personnel (employees)	-Pointed tools are never carried point up in any pocket or point down in any front pocket but carried with the sharp edge away from the body in a pouch or purpose made belt. -When using sharp knives, wear cut resistant gloves and always cut away from the body. -Retract the blade before you return it to your toolkit -Tools must not be abused or misused as minor defects may have serious consequences. -Select the correct tool for the job. -Keep tools in good condition. -Use tools in a safe manner. -Do not leave tools lying around where they can create a trip hazard or slip hazard. -Hand tools are inspected on a regular basis, including tools borrowed or brought to the job by the worker and faulty tools replaced. -Any employee before starting to use any hand tool, ensures that he/she is in a safe position, any other workers who may be affected are clear of the area and that he has any required personal protection in use. -Workers in the area must also wear required personal protection. -Any defects in tool must be reported and withdrawn from service. -Use battery operated tools where practicable.	3	3	9
Incorrect use of tools	Falling tools causing serious injuries on personnel beneath	3	4	12	All Aquachem site personnel (employees)/ Contractors/ members of the public	-Use wrist slings where required where works from height are being carried out using tools -Ensure area below works at height is adequately cordoned off from public -Tools must not be dropped or thrown from overhead to ground level.	1	3	3



SITE TID	INESS								
Hazard	Risk		essme rrent F		People at Risk	Controls	Res	idua	l Risk Rating
	lip/ trip/ Injury leading to broken bones, cuts, bruises, absenteeism from workplace	L	S	IR	KISK		L	S	RR
Slip/ trip/ fall	broken bones, cuts, bruises, absenteeism	3	4	12	All Aquachem site personnel (employees) /Contractors/ members of the public	-All employees must complete a site walk / induction prior to commencing works'. Any slip/trip/fall hazards identified must be noted and where possible rectified prior to works. These hazards must be communicated to all Aquachem staff onsite. -All Aquachem employees are expected to keep their work areas tidy and adhere to the 'clean as you go' policy -All openings in floors must be securely covered and be clearly marked to show that there is an opening below. -Debris and materials must not be thrown or dropped from a height -Route cables and hoses must be kept away from passageways. -Stack loose material in a way that prevents items falling -All site waste generated by Aquachem staff will be disposed of in accordance with site / client requirements.	3	3	9
Fire	Burns	2	4	8	All Aquachem site personnel (employees) /Contractors/ members of the pubic	-Smoking is prohibited on site and is only permitted in areas designated to 'smoking' -Keep fire escape routes clear of all obstructions, particularly combustible material	2	3	6



Hazard	Risk		essme rrent l		People at Risk	Controls		idua Ratii	l Risk ng
		L	S	IR	_ KISK		L	S	RR
Parking and unloading of work equipment Positioning of work equipment	Car parking, pedestrians & moving vehicles.	2	3	6	All Aquachem site personnel (employees)	- Access as directed by Building Management/Security Gain parking within the buildingManual handling best practice to be employed during the moving of equipmentAll materials to be moved in a controlled manner to a position of safety directly. No materials to be left unattended - Use trolleys where possible - Where site lifts are available, request its use prior to works - No equipment will be left in walkways or doorwaysAll equipment to be located (mechanically) within the area in which work is being carried out where possible and in proximity to the works / staff.	1	2	2



Hazard	Risk		essme rrent l		People at Risk	Controls		idua Ratir	ial Risk ting	
		L	S	IR			L	S	RR	
Trespassing/ Interference with Systems.	Injury to staff onsite	3	4	12	All Aquachem site personnel (employees) Contractors Members of the Public	 Working area to be cordoned off ensuring unauthorized personnel cannot access the site Appropriate warning signs to be erected, and displayed at entrances and perimeter boundaries to highlight dangers All access points to be closed / barricaded to prevent access, especially children Flammable and dangerous substances (chemicals) must be stored away in secure area (e.g. van) Site to be kept tided and well maintained 	1	2	2	
Subject to Violence & Aggression	Physical/ Psychological injury to staff onsite due to assault or encounter with aggressive behaviour	3	4	12	All Aquachem site personnel (employees) Contractors Members of the Public	Consider the number of personnel that should be deployed to undertake the work safely Consider the most appropriate timing for scheduling of work Advice of local community groups (where required) Take a non-confrontational approach with aggressors Report all incidents to Neylon management and seek advice if required.	1	2	2	



Hazard	Risk		essme rrent		People at Risk	Controls	Re	sidu Rat	al Risk ing
		L	S	IR			L	S	RR
Unsafe use and storage of ladders and step ladders	Falls from a height resulting in serious injury or death	4	5	20	All Aquachem site personnel (employees)	Ladders are only used where a risk assessment shows the use of other work equipment is not possible. Ladders are only used for short duration work (less than 30 minutes) and where the risk of injury is low. Ladders are only used for light work and not for work that involves carrying heavy or awkward items. Unauthorised use of ladders is prohibited. Ladders are set out on a firm base and leaning at the correct angle 75 degrees (1:4). Ladders are tied at the top to a secure structure. If a ladder cannot be tied at the top it is secured at the bottom or held by a second person. Ladders are not placed on any unstable base. Footwear is slip resistant, clean and free from mud/grease before climbing a ladder. 3 points of contact (contact with hand and feet) are maintained at the working position.	2	4	6



	The condition of the ladder is checked before each use for cracked or bent stiles or rungs, corrosion, defective or missing fittings or ties. Staff do not use the ladder if it is damaged in any way and report defects immediately to appropriate contact. Ladder is tagged to highlight it is damaged and 'out of use'. When using ladders staff do not work on top 3 rungs, or top 2 steps for stepladders. Where possible an alternative method of working is used, e.g., using extendable poles to clean high-level areas. Ladders are properly set up to avoid overreaching.	
--	---	--



Hazard	Risk				People at Risk	Controls	Residual Ris Rating				
		L	S	IR	KISK		L	S	RR		
Confined Space	Loss of consciousness, asphyxiation	4	5	20	All Aquachem site personnel (employees)	Operatives confined space trained. Operatives not to enter the space until respirable air with adequate ventilation can be confirmed via the use of a gas monitor, to be monitored throughout the duration of works. Buddy system in operation. Employ effective means of communication for within the space and outside. NO ONE is to enter the confined space in the event of someone collapsing. In this scenario arises, the fire brigade and ambulance should be immediately Contacted.	2	3	6		



Hazard	Risk		essme		People at Risk	Controls		idua Ratii	l Risk ng
		L	S	IR	Kisk		L	S	RR
Inadequate information, instruction & training	Damage to the environment. Chemical spills Irritation/injury to operatives respiratory/skin/ eyes causing irritation, burns	4	4	12	All Aquachem site personnel (employees)	-All employees to be trained in safe use / storage and clean-up of chemicals on site. -All employees will be issued with adequate personal protection equipment where chemicals are in use. -All operatives will be issued with adequate eye protection where dust is a risk to their work activity including; protective clothing (overalls), goggles, mouth masks and in some cases gloves, must be worn. -Use of chemicals where possible which have a low hazard rating. -All Aquachem onsite staff must be competent and trained in the safe use and disposal of all chemicals in use. -All Aquachem onsite staff will be provided with the Material Safety Data Sheet & COSHH assessment for each chemical in use. -Hazardous chemicals must not be brought on site without the Material Safety Data Sheet & COSHH assessment for each chemical in use. - Spill kit, Safety data sheets & COSHH assessments to remain at this location at all times -Ensure first aid and fire- fighting equipment is readily available at the point of use. -Store chemicals in the designated labelled containers. All containers to be clearly labelled with black permanent pen and/or correct label. -Regular maintenance of equipment to reduce emissions. -Personal hygiene - washing hands before meals and forbidding the consumption of food except in designated areas. Prevent the body and underclothing getting contaminated. -Housekeeping - dispose of used containers as per Aquachem Waste management procedure, clear up spillages quickly. -Waste disposal - adequate steps must be taken to insure the correct disposal of waste. - Storage drums will be located in a safe, secure location within a spill tray to prevent any chemical spillages.	2	3	6



COVID-19									
Hazard	Risk		essme irrent		People at Risk	Controls		idua Ratii	l Risk 1g
		L	S	IR	Kisk		L	S	RR
Exposure to COVID-19	COVID-19 – may be fatal. Stress Illness Mental health	4	4	16	All Aquachem site personnel (employees), contractors, visitors.	Follow the company procedures for COVID-19 prevetion. - Stop all non-essential visitors to site and those who must visit must completed the COVID-19 questionnaire. Provide visitors with site information on COVID-19 controls. - Monitor site access points to enable physical distancing —change the number of access points, either increase to reduce congestion or decrease to enable monitoring. - Remove sign systems that require skin contact e.g. pens, booklets. - Require all workers to wash or clean/sanitise their hands before entering or leaving the site. - Allow plenty of space (two metres) between people waiting to enter site. Reduce the number of people in attendance at site inductions and consider holding them outdoors wherever possible. Drivers should remain in their vehicles if the load will allow it and must wash or clean their hands before unloading goods and materials. Contact with COVID-19 case - Have come into close contact (within 2 metres for 15 minutes or more) with a confirmed case of COVID-19: Workers to follow government action of self-isolation — see www.hse.ie Travel is only required for essential travel; reduce the amount of time using public transport and to implement social distancing where possible (2m clearance from persons and not to travel in groups of more than 2 unless it is immediate family) Stay at home and only attend hospital in an emergency. Do not attend GP surgery and phone HSE helpline if further advice is required Follow good HSE hygiene measures at all times Avoid all visitors to your home unless they are providing a medical requirement Do not approach delivery staff, allow packages to be left on the doorstep	3	4	12



Hand Washing and Cleaning: Handwashing facilities with soap and hot water in place. Stringent hand washing taking place. Paper towels/hand dryers for drying of hands See handwashing guidance posters. Gel sanitisers in any area where washing facilities not readily available Employees to be reminded regularly to wash their hands for 20 seconds with warm water and soap and the importance of proper drying. Also reminded to catch coughs and sneezes in tissues – Follow Catch it, Bin it, Kill it and to avoid touching face, eyes, nose or mouth with unclean hands. Tissues will be made available throughout the workplace. To help reduce the spread of coronavirus (COVID-19) reminding everyone of the public health advice. Posters, leaflets and other materials are available for display. Frequently cleaning and disinfecting objects and surfaces that are touched regularly particularly in areas of high use such as door handles, light switches, reception area using appropriate cleaning products and methods. Rigorous checks will be carried out by line managers to ensure that the necessary procedures are being followed. Physical Distancing: Reducing the number of persons in any work area to comply with the 2metre (6.5 foot) gap recommended by the HSE. Taking steps to review work schedules to reduce the number of workers on-site at any one area at any one time. Also relocating workers to other tasks. Redesigning processes to ensure physical distancing in place. Conference calls to be used instead of face to face meetings. Ensuring sufficient rest breaks for staff. Physical distancing also to be adhered to in canteen area and smoking area. Staff to be reminded daily of the importance of physical distancing both in the workplace and outside of it. Management checks to ensure this is adhered to.



Where Risk Assessment identifies wearing of gloves as a requirement of the job, an adequate supply of these will be provided. Staff will be instructed on how to remove gloves carefully to reduce contamination and how to dispose of them safely. Staff to be reminded that wearing of gloves is not a substitute for good hand washing. Wearing of Respiratory Protective Equipment (RPE): Where RPE is a requirement for risks associated with the work undertaken the following measures will be followed: Tight-fitting respirators (such as disposable FFP3 masks and reusable half masks) rely on having a good seal with the wearer's face. A face fit test will be carried out to ensure the respiratory protective equipment (RPE) can protect the wearer. Wearers must be clean-shaven. Symptoms of Covid-19: If anyone becomes unwell with a new continuous cough or a high temperature in the workplace the Response to Suspect cases must be followed. Drivers: Persons should not share vehicles or cabs, where suitable distancing cannot be achieved.			
---	--	--	--